NOVA SCOTIA CALCULUS 12 · UNIT E · 10 QUESTIONS

Introduction to Antiderivatives — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **An antiderivative F of $3x^5$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An antiderivative F of $4x^4$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An antiderivative F of $7x^1$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An antiderivative of $4x^3$ is**

- **A** $x^4 + C$
- **B** $12x^2 + C$
- **C** $4x^4 + C$
- **D** $x^3 + C$

Understand It with Pulse | Flag a mistake

5 **An antiderivative of $\sec^2 x$ is**

- **A** $\sec x + C$
- **B** $\tan x + C$
- **C** $\cos x + C$
- **D** $\sin x + C$

Understand It with Pulse | Flag a mistake

6 **An antiderivative of $\frac{1}{x^2}$ is**

- A 1 ÷ x + C
- B -x + C
- C -1 ÷ x + C
- D ln x + C

Understand It with Pulse | Flag a mistake

7 **Antiderivatives of the same function differ by**

- A a variable
- B a factor of x
- C a sign only
- D a constant

Understand It with Pulse | Flag a mistake

8 **An antiderivative of 6x is**

- **A** $3x^2 + C$
- **B** $6x^2 + C$
- **C** $3x + C$
- **D** $12x + C$

Understand It with Pulse | Flag a mistake

9 **An antiderivative of 2 e^x is**

- **A** $e^{2x} + C$
- **B** $2\,e^x + C$
- **C** $2x\,e^x + C$
- **D** $e^x + C$

Understand It with Pulse | Flag a mistake

10 **An antiderivative of 5 cos x is**

A 5 cos x + C

B -5 sin x + C

C 5 sin x + C

D sin x + C

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 32
2. 25.6
3. 14
4. A
5. B
6. C
7. D
8. A
9. B
10. C

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